

Sheet 1 of 11

FORM PTO-1449
(Modified)

U.S. Department of Commerce
Patent and Trademark Office

Attorney Docket No.: NICHIA-00800

Serial No.: 09 500288

Applicant: Shuji Nakamura, *et al.*

Filing Date: February 8, 2000

Group Art Unit:

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(37 CFR § 1.98(b))

U.S. PATENT DOCUMENTS							
Examiner Initials		Serial Patent Number	Issue Date	Applicant Patentee	Class	Subclass	Filing Date
6/26	AA	3566215 ✓	2 23 71	Heywang	317	235	7 31 68
	AB	3593191 ✓	7 13 71	Henker	331	94.5	9 24 69
	AC	3655439 ✓	4 11 72	Seiter	117	212	6 16 69
	AD	3658585 ✓	4 25 72	Folkmann, <i>et al.</i>	117	201	2 26 70
	AE	3704427 ✓	11 28 72	Heywang	331	94.5	6 3 64
	AF	3705567 ✓	12 12 72	Emels	118	49	1 22 71
	AG	3737737 ✓	6 5 73	Heywang, <i>et al.</i>	317	234.R	10 6 71
	AH	3747559 ✓	7 24 73	Dietze	118	48	5 15 72
	AI	3793984 ✓	2 26 74	Kasper, <i>et al.</i>	118	48	11 13 72
	AJ	3819974 ✓	6 25 74	Stevenson, <i>et al.</i>	313	499	3 12 73
	AK	3853974 ✓	12 10 74	Reuschel, <i>et al.</i>	264	81	2 21 73
	AL	3941647 ✓	3 2 76	Druminski	156	612	3 8 73
	AM	3948693 ✓	4 6 76	Weyrich, <i>et al.</i>	148	171	7 23 74
	AN	3963537 ✓	6 15 76	Kniepkamp, <i>et al.</i>	148	175	8 27 74
	AO	3965347 ✓	6 22 76	Heywang	250	211.J	11 12 74
	AP	3974561 ✓	8 17 76	Schnoeller	29	611	5 30 74
	AQ	4020791 ✓	5 3 77	Reuschel, <i>et al.</i>	118	49.1	11 19 74
	AR	4062035 ✓	12 6 77	Winstel	357	17	1 28 77
	AS	4098223 ✓	7 4 78	Ertl, <i>et al.</i>	118	48	11 4 76
	AT	4102298 ✓	7 25 78	Dietze, <i>et al.</i>	118	5	6 10 76
	AU	4108539 ✓	8 22 78	Gort, <i>et al.</i>	350	201	11 18 76
	AV	4113381 ✓	9 12 78	Epstein	356	5	11 18 76
	AW	4133702 ✓	1 9 79	Krimmel	148	1.5	8 11 77
	AX	4140546 ✓	2 20 79	Krimmel	148	1.5	8 17 77
	AY	4154625 ✓	5 15 79	Golovchenko <i>et al.</i>	148	1.5	11 16 77
	AZ	4170018 ✓	10 2 79	Runge	357	17	3 30 78
	BA	4261770 ✓	4 14 81	Splitgerber, <i>et al.</i>	148	171	3 13 80
	BB	4351695 ✓	9 28 82	Hieber, <i>et al.</i>	156	603	1 2 81
	BC	4404265 ✓	9 13 83	Manasevit	428	689	4 7 78
	BD	4410993 ✓	10 18 83	Zschauer	372	44	4 17 81
	BE	4423349 ✓	12 27 83	Nakajima, <i>et al.</i>	313	487	7 1 81
	BF	4505765 ✓	3 19 85	Trommer	148	171	6 17 83
	BG	4521448 ✓	6 4 85	Sasaki	427	88	3 3 83

Examiner: *[Signature]* Date Considered: 6/21/01

EXAMINER Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449
(Modified)U.S. Department of Commerce
Patent and Trademark Office

Attorney Docket No.: NICHIA-00800

Serial No.: 09 500288

Applicant: Shuji Nakamura, *et al.*

Filing Date: February 8, 2000

Group Art Unit:

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(37 CFR § 1.98(b))

42	BH	4531142	✓	7/23/85	Weyrich, <i>et al.</i>	357	17	2/16/83
	BI	4568206	✓	2/4/86	Imazaike	384	530	12/3/84
	BJ	4596998	✓	6/24/86	Krimmel	357	17	7/19/84
	BK	4599244	✓	7/8/86	Falckenberg, <i>et al.</i>	427	74	9/12/84
	BL	4599245	✓	7/8/86	Falckenberg, <i>et al.</i>	427	74	9/11/84
	BM	4604637	✓	8/5/86	Ruhle, <i>et al.</i>	357	17	3/1/83
	BN	4615766	✓	10/7/86	Jackson, <i>et al.</i>	156	662	2/27/85
	BO	4656636	✗	4/7/87	Amann, <i>et al.</i>	372	50	12/23/85
	BP	4661175	✓	4/28/87	Kuphal, <i>et al.</i>	148	171	6/6/85
	BQ	4670093	✓	6/2/87	Maerz, <i>et al.</i>	156	649	4/21/86
	BR	4682337	✓	7/21/87	Amann	372	44	9/13/85
	BS	4683574	✓	7/28/87	Heinen	372	44	9/12/85
	BT	4722088	✓	1/26/88	Wolf	372	44	9/6/85
	BU	4740259	✓	4/26/88	Heinen	156	234	9/15/86
	BV	4742525	✓	5/3/88	Heinen, <i>et al.</i>	372	44	9/6/85
	BW	4744088	✓	5/10/88	Heinen, <i>et al.</i>	372	50	3/13/87
	BX	4746195	✓	5/24/88	Auracher, <i>et al.</i>	350	320	3/13/85
	BY	4763979	✓	8/16/88	Heywang	350	96.20	9/23/86
	BZ	4768199	✓	8/30/88	Heinen, <i>et al.</i>	372	36	9/5/86
	CA	4792200	✓	12/20/88	Amann, <i>et al.</i>	350	96.12	4/1/87
	CB	4792959	✓	12/20/88	Mueller, <i>et al.</i>	372	46	1/30/87
	CC	4818722	✓	4/4/89	Heinen	437	129	5/26/87
	CD	4829188	✓	5/9/89	Shinomiya, <i>et al.</i>	250	483.1	10/1/87
	CE	4835575	✓	5/30/89	Plihal	357	30	2/3/88
	CF	4841344	✓	6/20/89	Heinen	357	17	12/7/87
	CG	4845723	✓	7/4/89	Heinen, <i>et al.</i>	372	38	2/22/88
	CH	4855118	✓	8/8/89	Ichinose, <i>et al.</i>	423	301	4/12/88
	CI	4859903	✓	8/22/89	Minematu, <i>et al.</i>	313	487	3/2/88
	CJ	4864369	✓	9/5/89	Snyder, <i>et al.</i>	357	17	7/5/88
	CK	4869568	✗	9/26/89	Schimpe	350	96.12	9/29/88
	CL	4890033	✓	12/26/89	Ichinomiya, <i>et al.</i>	313	487	6/28/88
	CM	4904617	✓	2/27/90	Muschke	437	129	8/25/88
	CN	4904618	✓	2/27/90	Neumark	437	150	8/22/88
	CO	4907044	✓	3/6/90	Schellhorn, <i>et al.</i>	357	17	7/14/89
	CP	4907534	✓	3/13/90	Huang, <i>et al.</i>	118	725	12/9/88
	CQ	4911102	✓	3/27/90	Manabe, <i>et al.</i>	118	719	1/26/88

Examiner

Date Considered

6/21/01

EXAMINER

Initial citation considered Draw line through citation if not in conformance and not considered Include copy of this form with next communication to applicant

FORM PTO-1449
(Modified)U.S. Department of Commerce
Patent and Trademark Office

Attorney Docket No.: NICHIA-00800

Serial No.: 09 500288

Applicant: Shuji Nakamura, *et al.*

Filing Date: February 8, 2000

Group Art Unit:

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(37 CFR § 1.98(b))

WS	CP	4918497	✓	4/17/90	Edmond	357	17	12/14/88
	CS	4929907	✓	5/29/90	Berkel	330	252	3/8/89
	CT	4944837	✓	7/31/90	Nishikawa, <i>et al.</i>	156	646	2/28/89
	CU	4945394	✓	7/31/90	Palmour, <i>et al.</i>	357	34	10/26/87
	CV	4946547	✓	8/7/90	Palmour, <i>et al.</i>	156	643	10/13/89
	CW	4947218	✓	8/7/90	Edmond, <i>et al.</i>	357	13	11/3/87
	CX	4959174	✓	9/25/90	Nakajima, <i>et al.</i>	252	301.6R	3/16/89
	CY	4960728	✓	10/2/90	Schaae, <i>et al.</i>	437	82	10/11/88
	CZ	4966862	✓	10/30/90	Edmond	437	100	8/28/89
	DA	4971739	✓	11/20/90	Ichinose, <i>et al.</i>	264	61	4/12/89
	DB	4977567	✓	12/11/90	Hanke	372	45	10/11/89
	DC	4982314	✓	1/1/91	Miki	363	16	12/4/89
	DD	4985742	✓	1/15/91	Pankove	357	34	7/7/89
	DE	4987576	✓	1/22/91	Heinen	372	46	11/3/89
	DF	4990466	✓	2/5/91	Shieh, <i>et al.</i>	437	129	11/1/88
	DG	4990990	✓	2/5/91	Albrecht, <i>et al.</i>	357	30	3/23/88
	DH	5005057	✓	4/2/91	Izumiya, <i>et al.</i>	357	17	4/13/90
	DI	5006908	✓	4/9/91	Matsuoka, <i>et al.</i>	357	17	2/12/90
	DJ	5008735	✓	4/16/91	Edmond, <i>et al.</i>	357	74	12/7/89
	DK	5008789	✓	4/16/91	Arai, <i>et al.</i>	362	255	2/14/90
	DL	5019746	✓	5/28/91	Merg	313	512	12/4/89
	DM	5023686	✓	6/11/91	Helmut, <i>et al.</i>	357	30	6/15/90
	DN	5027168	✓	6/25/91	Edmond	357	17	8/28/89
	DO	5034956	✓	7/23/91	Gessner, <i>et al.</i>	372	45	11/2/89
	DP	5041334	✓	8/20/91	Nakajima, <i>et al.</i>	428	407	12/19/89
	DQ	5042043	✓	8/20/91	Hatano, <i>et al.</i>	372	45	4/13/90
	DR	5045896	✓	9/3/91	Ash, <i>et al.</i>	357	17	3/21/89
	DS	5049779	✓	9/17/91	Itsuki, <i>et al.</i>	313	486	4/28/89
	DT	5061972	✓	10/29/91	Edmond	357	13	9/13/90
	DU	5065207	✓	11/12/91	Heinen	357	30	2/5/91
	DV	5077145	✓	12/31/91	Shinomiya, <i>et al.</i>	428	691	12/21/90
	DW	5093576	✓	3/3/92	Edmond, <i>et al.</i>	250	370.01	3/15/91
	DX	5119540	✓	6/9/92	Kong, <i>et al.</i>	29	25.01	7/24/90
	DY	5120619	✓	6/9/92	Nakajima, <i>et al.</i>	428	690	11/7/90
	DZ	5122845	✓	6/16/92	Manabe, <i>et al.</i>	357	17	2/26/90
	EA	5128955	✓	7/7/92	Danielmeyer	372	94	8/18/88

Examiner:

Date Considered:

EXAMINER

Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449
(Modified)U.S. Department of Commerce
Patent and Trademark Office

Attorney Docket No.: NICHIA-00800

Serial No.: 09 500288

Applicant: Shuji Nakamura, *et al.*

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(37 CFR § 1.98(b))

Filing Date: February 8, 2000

Group Art Unit:

WB	EB	5146465	✓	9 8 92	Khan, <i>et al.</i>	372	45	2 1 91
	EC	5155062	✓	10 13 92	Coleman	437	100	12 20 90
	ED	5171370	✓	12 15 92	Reithmaier, <i>et al.</i>	118	726	4 18 90
	EE	5182670	✓	1 26 93	Khan, <i>et al.</i>	359	359	8 30 91
	EF	5184247	✓	2 2 93	Schimpe	359	344	7 17 90
	EG	5185207	✓	2 9 93	Furuoka, <i>et al.</i>	428	404	12 27 91
	EH	5200022	✓	4 6 93	Kong, <i>et al.</i>	156	612	10 3 90
	EI	5202777	✓	4 13 93	Sluzky, <i>et al.</i>	359	50	4/1/92
	EJ	5205905	✓	4 27 93	Kotaki, <i>et al.</i>	156	662	5/30/91
	EK	5208878	✓	5 4 93	Thulke	385	14	10/2/91
	EL	5210051	✓	5/11/93	Carter, Jr.	437	107	6/5/91
	EM	5218216	✓	6 8 93	Manabe, <i>et al.</i>	257	103	12/20/91
	EN	5229626	✓	7 20 93	Ebitani, <i>et al.</i>	257	84	3/27/92
	EO	5233204	✓	8 3 93	Fletcher, <i>et al.</i>	257	13	1/10/92
	EP	5239188	✓	8 24 93	Takeuchi, <i>et al.</i>	257	76	11/4/92
	EQ	5247533	✓	9/21/93	Okazaki, <i>et al.</i>	372	45	12/26/91
	ER	5250366	✓	10 5 93	Nakajima, <i>et al.</i>	428	690	5/8/92
	ES	5252499	✓	10 12 93	Rothschild	437	22	8/15/88
	ET	5252839	✓	10 12 93	Fouquet	257	13	6/10/92
	EU	5260960	✓	11/9/93	Amann, <i>et al.</i>	372	46	4/23/92
	EV	5264713	✓	11/23/93	Palmour	257	77	6/14/91
	EW	5266503	✓	11 30 93	Wang, <i>et al.</i>	437	24	10/2/91
	EX	5270554	✓	12 14 93	Palmour	257	77	6/14/91
	EY	5272108	✓	12 21 93	Kozawa	437	127	2/26/92
	EZ	5278433	✓	1/11/94	Manabe, <i>et al.</i>	257	103	8/7/92
	FA	5281830	✓	1/25 94	Kotaki, <i>et al.</i>	257	86	10/24/91
	FB	5290393	✓	3 1 94	Nakamura	156	613	1/28/92
	FC	5306662	✓	4 26 94	Nakamura, <i>et al.</i>	437	107	11/2 92
	FD	5312560	✓	5/17 94	Somatomo, <i>et al.</i>	252	301.4 S	3/18/93
	FE	5323022	✓	6 21 94	Glass, <i>et al.</i>	257	77	9/10/92
	FF	5330791	✓	7 19 94	Aihara, <i>et al.</i>	427	215	4 16 93
	FG	5334277	✓	8 2 94	Nakamura	117	102	10 22 91
	FH	5336080	✓	8 9 94	Sumitomo, <i>et al.</i>	428	407	12 17 92
	FI	5338944	✓	8 16 94	Edmond, <i>et al.</i>	257	76	9 22 93
	FJ	5341390	✓	8 23 94	Yamada, <i>et al.</i>	372	45	4 15 93
	FK	5343316	✓	8 30 94	Morimoto, <i>et al.</i>	359	50	6 29 93

Examiner: 

Date Considered: 6/21/01

EXAMINER

Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449
(Modified)U.S. Department of Commerce
Patent and Trademark Office

Attorney Docket No.: NICHIA-00800

Serial No.: 09 500288

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(37 CFR § 1.98(b))

Applicant: Shuji Nakamura, *et al.*

Filing Date: February 8, 2000

Group Art Unit:

W3L	FL	5344791	✓	9 6 94	Huang	437	126	8 14 92
	FM	5359345	✓	10 25 94	Hunter	345	102	8 5 92
	FN	5363390	✓	11 8 94	Yang, <i>et al.</i>	372	22	11/22/93
	FO	5366834	✓	11 22 94	Yoneda, <i>et al.</i>	430	23	5 5 93
	FP	5369289	✓	11 29 94	Tamaki, <i>et al.</i>	257	99	10/30/92
	FQ	5376303	✓	12 27 94	Royce, <i>et al.</i>	252	301.4 R	1/10/94
	FR	5376580	✓	12/27/94	Kish, <i>et al.</i>	437	127	3/19/93
	FS	5381103	✓	1/10/95	Edmond, <i>et al.</i>	324	753	10/13/92
	FT	5382822	✓	1/17/95	Stein	257	410	9/27/93
	FU	5389571	✓	2/14/95	Takeuchi, <i>et al.</i>	437	133	4/16/93
	FV	5390210	✓	2/14/95	Fouquet, <i>et al.</i>	372	92	11/22/93
	FW	5393993	✓	2/28/95	Edmond, <i>et al.</i>	257	77	12/13/93
	FX	5394005	✓	2/28/95	Brown, <i>et al.</i>	257	461	2/18/94
	FY	5403774	✓	4/4/95	Shieh, <i>et al.</i>	437	129	11/6/92
	FZ	5404282	✓	4/4/95	Klinke, <i>et al.</i>	362	249	8/19/94
	GA	5408120	✓	4/18/95	Manabe, <i>et al.</i>	257	431	1/22/93
	GB	5409859	✓	4/25/95	Glass, <i>et al.</i>	437	187	4/22/94
	GC	5416342	✓	5/16/95	Edmond, <i>et al.</i>	257	76	6/23/93
	GD	5417886	✓	5/23/95	Tateiwa, <i>et al.</i>	252	301.4 R	9/20/93
	GE	5433169	✓	7/18/95	Nakamura	117	102	4/6/94
	GF	5433533	✓	7/18/95	Imazaiki	384	488	12/20/93
	GG	5433888	✓	7/18/95	Okada, <i>et al.</i>	252	301.4 R	9/20/93
	GH	5435938	✓	7/25/95	Bando, <i>et al.</i>	252	301.4 S	3/10/94
	GI	5438198	✓	8/1/95	Ebitani, <i>et al.</i>	250	330	5/3/94
	GJ	5459107	✓	10/17/95	Palmour	437	238	6/5/92
	GK	5465249	✓	11/7/95	Cooper, Jr. <i>et al.</i>	365	149	11/26/91
	GL	5467291	✓	11/14/95	Fan, <i>et al.</i>	364	578	12/5/91
	GM	5468678	✓	11/21/95	Nakamura, <i>et al.</i>	437	107	1/12/94
	GN	5475241	✓	12/12/95	Harrah, <i>et al.</i>	257	99	10/27/93
	GO	5497012	✓	3 5 96	Moll	257	183	6/15/94
	GP	5502316	✓	3 26 96	Kish, <i>et al.</i>	257	94	10/12/95
	GQ	5506421	✓	4 9 96	Palmour	257	77	11/24/92
	GR	5511084	✓	4 23 96	Amann	372	20	1/17/95
	GS	5514627	✓	5 7 96	Lowery, <i>et al.</i>	437	209	1/24/94
	GT	5523018	✓	6 4 96	Okada, <i>et al.</i>	252	301.4 P	3 23 95
	GU	5523589	✓	6 4 96	Edmond, <i>et al.</i>	257	77	9 20 94

Examiner:

Date Considered:

EXAMINER:

Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 6 of 11

FORM PTO-1449
(Modified)U.S. Department of Commerce
Patent and Trademark Office

Attorney Docket No.: NICHIA-00800

Serial No.: 09 500288

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(37 CFR § 1.98(b))

Applicant: Shuji Nakamura, *et al.*

Filing Date: February 8, 2000

Group Art Unit:

W	GW	5539217	✓	7/23/96	Edmond, <i>et al.</i>	257	77	8/9/93
	GW	5563422	✓	10/8/96	Nakamura, <i>et al.</i>	257	13	4/28/94
	GX	5578839	✓	11/26/96	Nakamura, <i>et al.</i>	257	96	11/17/93
	GY	5583879	✓	12/10/96	Yamazaki, <i>et al.</i>	372	45	4/19/95
	GC	5585648	✓	12/17/96	Tischler	257	77	2/3/95
	HA	5587593	✓	12/24/96	Koide, <i>et al.</i>	257	94	4/19/95
	HB	5592501	✓	1/7/97	Edmond, <i>et al.</i>	372	45	9/20/94
	HC	5592578	✓	1/7/97	Ruh	385	31	11/1/95
	HD	5596595	✓	1/21/97	Tan, <i>et al.</i>	372	96	6/8/95
	HE	5604135	✓	2/18/97	Edmond, <i>et al.</i>	437	22	8/12/94
	HF	5604763	✓	2/18/97	Kato, <i>et al.</i>	372	45	4/19/95
	HG	5612260	✓	3/18/97	Palmour	437	238	12/9/94
	HH	5614736	✓	3/25/97	Neumann, <i>et al.</i>	257	102	9/25/95
	HI	5616177	✓	4/1/97	Yamada	117	102	2/22/95
	HJ	5620557	✓	4/15/97	Manabe, <i>et al.</i>	438	507	6/26/95
	HK	5621749	✓	4/15/97	Baney	372	69	9/6/95
	HL	5625202	✓	4/29/97	Chai	257	94	6/8/95
	HM	5627244	✓	5/6/97	Sato	526	92	4/26/95
	HN	5629531	✓	5/13/97	Palmour	257	77	12/9/94
	HO	5631190	✓	5/20/97	Negley	438	33	10/7/94
	HP	5635146	✓	6/3/97	Singh, <i>et al.</i>	423	65	11/30/95
	HQ	5642375	✓	6/24/97	King, <i>et al.</i>	372	97	10/26/95
	HR	5650641	✓	7/22/97	Sassa, <i>et al.</i>	257	88	8/31/95
	HS	5652434	✓	7/29/97	Nakamura, <i>et al.</i>	257	13	6/17/96
	HT	5652438	✓	7/29/97	Sassa, <i>et al.</i>	257	94	7/19/95
	HU	5656832	✓	8/12/97	Ohba, <i>et al.</i>	257	190	3/8/95
	HV	5659568	✓	8/19/97	Wang, <i>et al.</i>	372	96	5/23/95
	HW	5661074	✓	8/26/97	Tischler	438	32	5/24/95
	HX	5661316	✓	8/26/97	Kish, Jr., <i>et al.</i>	257	190	9/20/96
	HY	5661742	✓	8/26/97	Huang, <i>et al.</i>	372	46	5/22/96
	HZ	5670798	✓	9/23/97	Schetzina	257	96	3/29/95
	IA	5679153	✓	10/21/97	Dmitrev, <i>et al.</i>	117	106	11/30/94
	IB	5684623	✓	11/4/97	King, <i>et al.</i>	359	346	11/21/96
	IC	5686737	✓	11/11/97	Allen	257	77	9/16/94
	ID	5700713	✓	12/23/97	Yamazaki, <i>et al.</i>	437	129	3/20/95
	IE	5707139	✓	1/13/98	Hartz	362	231	11/1/95

Examiner:

Date Considered:

EXAMINER

Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

6/21/01

<div style="border: 1px solid black; border-radius: 50%; padding: 10px; display: inline-block;"> O I P E MAY 22 2000 PATENT & TRADEMARK OFFICE </div>		U.S. Department of Commerce Patent and Trademark Office		Attorney Docket No.: NICHIA-00800	Serial No.: 09 500288
FORM PTO-1449 (Modified)				Applicant: Shuji Nakamura, <i>et al</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (37 CFR § 1.98(b))				Filing Date: February 8, 2000	Group Art Unit

<div style="text-align: center;">W S L</div> <div style="border-left: 2px solid black; height: 100%; margin-left: 5px;"></div>	IF	5718760	✓	2/17/98	Carter, <i>et al.</i>	117	84	2/5/96
	IG	5719409	✓	2/17/98	Singh, <i>et al.</i>	257	77	6/6/96
	IH	5724062	✓	3/3/98	Hunter	345	102	9/21/94
	II	5724373	✓	3/3/98	Chang	372	20	11/15/96
	IJ	5724376	✓	3/3/98	Kish, Jr., <i>et al.</i>	372	96	11/30/95
	IK	5727014	✓	3/10/98	Wang, <i>et al.</i>	372	96	10/31/95
	IL	5729029	✓	3/17/98	Rudaz	257	13	9/6/96
	IM	5729567	✓	3/17/98	Nakagawa	372	99	4/25/96
	IN	5733796	✓	3/31/98	Manabe, <i>et al.</i>	437	127	11/9/95
	IO	5734182	✓	3/31/98	Nakamura, <i>et al.</i>	257	96	6/10/96
	IP	5739552	✓	4/14/98	Kimura, <i>et al.</i>	257	89	10/24/95
	IQ	5739554	✓	4/14/98	Edmond, <i>et al.</i>	257	103	5/8/95
	IR	5741431	✓	4/21/98	Shih	216	65	5/15/97
	IS	5741724	✓	4/21/98	Ramdani, <i>et al.</i>	437	128	12/27/96
	IT	5742133	✓	4/21/98	Wilhelm, <i>et al.</i>	315	291	9/9/96
	IU	5747832	✓	5/5/98	Nakamura, <i>et al.</i>	257	103	6/10/96
	IV	5753939	✓	5/19/98	Sassa, <i>et al.</i>	257	94	3/7/97
	IW	5758951	✓	6/2/98	Haiz	362	259	6/27/97
	IX	5761229	✓	6/2/98	Baldwin, <i>et al.</i>	372	31	1/25/96
	IY	5767581	✓	6/16/98	Nakamura, <i>et al.</i>	257	749	6/17/96
	IZ	5771254	✓	6/23/98	Baldwin, <i>et al.</i>	372	31	6/3/96
	JA	5776837	✓	7/7/98	Palmour	438	767	11/19/96
	JB	5777350	✓	7/7/98	Nakamura, <i>et al.</i>	257	96	11/30/95
	JC	5777433	✓	7/7/98	Lester, <i>et al.</i>	313	512	7/11/96
	JD	5779924	✓	7/14/98	Krames, <i>et al.</i>	216	24	3/22/96
	JE	5780120	✓	7/14/98	Belouet, <i>et al.</i>	427	554	12/18/96
	JF	5785404	✓	7/28/98	Wiese	362	32	6/29/95
	JG	5793054	✓	8/11/98	Nido	257	18	6/13/96
	JH	5793062	✓	8/11/98	Kish, Jr., <i>et al.</i>	257	98	10/24/97
	JI	5805624	✓	9/8/98	Yang, <i>et al.</i>	372	45	7/30/96
JJ	5808323	✓	9/15/98	Spaeth, <i>et al.</i>	257	88	3/29/96	
JE	5808592	✓	9/15/98	Mizutani, <i>et al.</i>	345	83	4/21/95	
JL	5809050	✓	9/15/98	Baldwin, <i>et al.</i>	372	43	1/25/96	
JM	5811319	✓	9/22/98	Koike, <i>et al.</i>	438	46	3/26/96	
JN	5811931	✓	9/22/98	Mueller-Mach, <i>et al.</i>	313	512	3/4/96	
JO	5812105	✓	9/22/98	Van De Ven	345	83	6/10/96	

Examiner:

Date Considered: 6/21/01

EXAMINER Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449
(Modified)U.S. Department of Commerce
Patent and Trademark Office

Attorney Docket No.: NICHIA-00800

Serial No.: 09 500288

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(37 CFR § 1.98(b))

Applicant: Shuji Nakamura, *et al.*

Filing Date: February 8, 2000

Group Art Unit:

W3V	JP	5812570	✓	9/22/98	Spaeth	372	36	9/30/96
	JQ	5814870	✓	9/29/98	Spaeth	257	433	1/6/97
	JP	5818861	✓	10/6/98	Tan, <i>et al.</i>	372	46	7/19/96
	JS	5828684	✓	10/27/98	Van De Walle	372	45	12/29/95
	JT	5831288	✓	11/3/98	Singh, <i>et al.</i>	257	77	9/29/97
	JU	5835514	✓	11/10/98	Yuen, <i>et al.</i>	372	36	1/25/96
	JV	5835522	✓	11/10/98	King, <i>et al.</i>	372	97	11/19/96
	JW	5837561	✓	11/17/98	Kish, Jr., <i>et al.</i>	438	47	5/23/97
	JX	5838706	✓	11/17/98	Edmond, <i>et al.</i>	372	45	11/19/96
	JY	5838707	✓	11/17/98	Ramdani, <i>et al.</i>	372	45	12/27/96
	JZ	5838708	✓	11/17/98	Lin, <i>et al.</i>	372	50	8/1/95
	KA	5846844	✓	12/8/98	Akasaki, <i>et al.</i>	437	21	2/7/96
	KB	5847507	✓	12/8/98	Butterworth, <i>et al.</i>	313	512	7/14/97
	KC	5850410	✓	12/15/98	Kuramata	372	43	3/18/96
	KD	5855924	✓	1/5/99	Lumbard	425	116	12/27/95
	KE	5858277	✓	1/12/99	Chau, <i>et al.</i>	252	301.4 F	12/23/92
	KF	5859496	✓	1/12/99	Murazaki, <i>et al.</i>	313	485	5/10/96
	KG	5861190	✓	1/19/99	Greene, <i>et al.</i>	427	248.1	3/25/96
	KH	5861713	✓	1/19/99	Kondo, <i>et al.</i>	313	495	6/26/97
	KI	5862167	✓	1/19/99	Sassa, <i>et al.</i>	372	45	5/27/97
	KJ	5867516	✓	2/2/99	Corzine, <i>et al.</i>	372	45	3/12/96
	KK	5868837	✓	2/9/99	Disalvo, <i>et al.</i>	117	952	1/13/98
	KL	5877558	✓	3/2/99	Nakamura, <i>et al.</i>	257	749	12/19/97
	KM	5879587	✓	3/9/99	Yale	252	301.45	9/24/97
	KN	5879588	✓	3/9/99	Yale	252	301.45	9/24/97
	KO	5880486	✓	3/9/99	Nakamura, <i>et al.</i>	257	96	8/30/96
	KP	5889802	✓	3/30/99	Walker	372	31	3/27/97
	KQ	5889806	✓	3/30/99	Nagai, <i>et al.</i>	372	45	8/8/97
	KR	5892784	✓	4/6/99	Tan, <i>et al.</i>	372	43	10/27/94
	KS	5892787	✓	4/6/99	Tan, <i>et al.</i>	372	96	4/22/96
	KT	5900650	✓	5/4/99	Nitta	257	94	7/2/97
	KU	5905276	✓	5/18/99	Manabe, <i>et al.</i>	257	103	11/6/97
	KV	5907151	✓	5/25/99	Gramann, <i>et al.</i>	250	214.1	5/27/97
	KW	5912477	✓	6/15/99	Negley	257	95	5/20/97
	KX	5917202	✓	6/29/99	Hantz, <i>et al.</i>	257	98	12/21/95
	KY	5919422	✓	7/6/99	Yamanaka, <i>et al.</i>	422	121	7/26/96

Examiner:

Date Considered: 6/21/01

EXAMINER

Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449
(Modified)U.S. Department of Commerce
Patent and Trademark Office

Attorney Docket No.: NICHIA-00800

Serial No.: 09 500288

Applicant: Shuji Nakamura, *et al.*

Filing Date: February 8, 2000

Group Art Unit:

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(37 CFR § 1.98(b))

W2	EC	5920766	✓	7 6 99	Floyd	438	35	1 7 98
	LA	5923053	✓	7 13 99	Jakowetz, <i>et al.</i>	257	95	9 30 96
	LB	5923118	✓	6 13 99	Jennato, <i>et al.</i>	313	485	3 7 97
	LC	5923690	✓	7 13 99	Kume, <i>et al.</i>	372	46	1 24 97
	LD	5923946	✓	7 13 99	Negley	438	4	4 17 97
	LE	5925898	✓	7 20 99	Spath	257	98	1 26 98
	LF	5927995	✓	7 27 99	Chen, <i>et al.</i>	438	517	4 9 97
	LG	5935705	✓	8 10 99	Chen, <i>et al.</i>	428	367	10 15 97
	LH	5936985	✓	8 10 99	Yamamoto, <i>et al.</i>	372	38	9 13 95
	LI	5945689	✓	8 31 99	Koike, <i>et al.</i>	257	88	3 18 96
	LJ	5953361	✓	9 14 99	Borchert, <i>et al.</i>	372	96	11 25 97
	LK	5953581	✓	9 14 99	Yamasaki, <i>et al.</i>	438	22	4 17 97
	LL	5958295	✓	9 28 99	Yale	252	301.4 S	9 24 97
	LM	5959316	✓	9 28 99	Lowery	257	98	9 1 98
	LN	5959401	✓	9 28 99	Asami, <i>et al.</i>	313	503	5 21 97
	LO	5961723	✓	10 5 99	Roithner, <i>et al.</i>	118	715	11 26 96
	LP	5964943	✓	10 12 99	Stein, <i>et al.</i>	117	88	6 25 97
	LQ	5966393	✓	10 12 99	Hide, <i>et al.</i>	372	23	2 4 97
	LR	5968265	✓	10 19 99	Stein, <i>et al.</i>	117	71	1 27 98
	LS	5969378	✓	10 19 99	Singh	257	77	7 10 97
	LT	5972781	✓	10 26 99	Wegleiter, <i>et al.</i>	438	460	9 30 97
	LU	5972801	✓	10 26 99	Lipkin, <i>et al.</i>	438	770	11 8 95
	LV	5973336	✓	10 26 99	Hanke, <i>et al.</i>	257	94	11 3 97
	LW	5980631	✓	11 9 99	Tews, <i>et al.</i>	117	89	12 17 97
	LX	5981945	✓	11 9 99	Spaeth, <i>et al.</i>	250	239	3 8 96
	LY	5981979	✓	11 9 99	Brunner	257	99	11 26 97
	LZ	5982970	✓	11 9 99	Schneider	385	125	9 19 97
	MA	5986317	✓	11 16 99	Wiese	257	433	9 29 95
	MB	5991160	✓	11 23 99	Lumbard	361	760	12 27 95
	MC	5994722	✓	11 30 99	Averbeck, <i>et al.</i>	257	89	6 30 98
	MD	5998925	✓	12 7 99	Shimizu, <i>et al.</i>	313	503	7 29 97
	ME	5999552	✓	12 7 99	Bogner, <i>et al.</i>	372	43	1 20 98

FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

	MF	Document Number	Publication Date	Country Patent Office	Class	Subclass	Translation
WS	MC	CA1325582	✓	12 28 93	CA	H011	21 36B
11	ME	EP0356059A2	✓	2 28 90	EP	H011	21 38

Examiner: 

Date Considered: 6/24/01

EXAMINER

Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 10 of 11

FORM PTO-1449
(Modified)

MAY 22 2000

U.S. Department of Commerce
Patent and Trademark Office

Attorney Docket No.: NICHIA-00800

Serial No.: 09 500288

Applicant: Shuji Nakamura, et al

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(37 CFR § 1.98(b))

Filing Date: February 8, 2000

Group Art Unit:

Wx	MI	EP0356059A3	✓	2/28/90	EP	HO1L	21/38	
	MC	EP0380340A2	✓	8/1/90	EP	HO1L	29/91	
	MK	EP0380340A3	✓	8/1/90	EP	HO1L	29/91	
	ML	EP0637069A1	✓	2/1/95	EP	HO1L	21/473	
	MM	EP0731512A2	✓	9/11/96	EP	HO1L	33/00	
	MN	EP0731512A3	✓	7/2/97	EP	HO1L	33/00	
	MO	EP0781619A1	✓	7/2/97	EP	B23H	7/02	
	MP	EP0871208A2	✓	10/14/98	EP	HO1L	21/20	
	MQ	EP0871208A3	✓	12/16/98	EP	HO1L	21/20	
	MR	EP0880181A2	✓	11/25/98	EP	HO1L	29/45	
	MS	EP0880181A3	✓	1/20/99	EP	HO1L	29/45	
	MT	EP0905799A2	✓	3/31/99	EP	HO1L	33/00	
	MU	EP0936682A1	✓	8/18/99	EP	HO1L	33/00	
	MV	FR2613136	✓	9/30/88	FR	HO1L	33/00	
	MW	GB2322737A	✓	3/2/98	GB	HO1L	21/304	
	MX	GB2323210A	✓	9/16/98	GB	HO1L	33/00	
	MY	JP05152609	✓	6/18/93	JP	HO1L	33/00	
	MZ	JP0766192	✓	3/10/95	JP	HO1L	29/78	
	NA	JP09193137	✓	7/29/97	JP	B28D	5/044	
	NB	JP10233529	✓	2/14/97	JP	HO1L	33/00	
	NC	JP1064854	✓	7/18/96	JP	HO1L	21/301	
	ND	JP7176794	✓	7/14/95	JP	HO1L	33/00	
	NE	WO9702478A1	✓	1/23/97	PCT	G01M	19/00	
	NF	WO9702610A1	✓	1/23/97	PCT	HO1L	31/173	
	NG	WO9717730A1	✓	5/15/97	PCT	HO1L	29/24	
	NH	WO9727629A1	✓	7/31/97	PCT	HO1L	29/06	
	NI	WO9739485A1	✓	10/23/97	PCT	HO1L	2706	
	NJ	WO9750132A1	✓	12/31/97	PCT	HO1L	33/00	
	NK	WO9805078A1	✓	2/5/98	PCT	HO1L	33/00	
	NL	WO9812757A1	✓	3/26/98	PCT	HO1L	33/00	
	NM	WO9834304A1	✓	8/6/98	PCT	HO1S	3/025	
	NN	WO9837586A1	✓	8/27/98	PCT	HO1L	33/00	
	NO	WO9842879A1	✓	10/1/98	PCT	C21C	5/35	
	NP	WO9842897A1	✓	10/1/98	PCT	C30B	25/12	
	NQ	WO9847185A1	✓	10/22/98	PCT	HO1L	33/00	
	NR	WO9849731A1	✓	11/5/98	PCT	HO1L	29/739	

Examiner

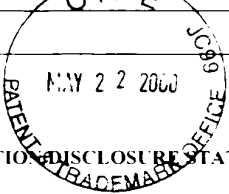
Date Considered

6/21/01

EXAMINER

Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 11 of 11
FORM PTO-1449
(Modified)



U.S. Department of Commerce
Patent and Trademark Office

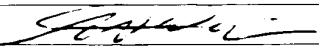
Attorney Docket No.: NICHIA-00800
Serial No.: 09 500288
Applicant: Shuji Nakamura, *et al.*
Filing Date: February 8, 2000
Group Art Unit:

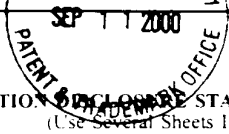
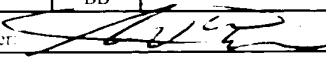
INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(37 CFR § 1.98(b))

NS	WO9857378A1	✓	12 17 98	PCT	HO1L	29 73	
NT	WO9910936A2	✓	3 4 99	PCT	HO1L	33 00	
NU	WO9910936A3	✓	3 4 99	PCT	HO1L	33 00	
NV	WO9918617A1	✓	4 15 99	PCT	HO1L	33 00	

OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)

NW	✓	"Novel Metalorganic Chemical Vapor Deposition System for GaN Growth," S. Nakamura, American Institute of Physics, pp.2021-2023, 5 6 91.
NX	✓	"Out of the Blue," Forbes Global Magazine, pp.66-71, 9 6 99.
NY	✓	"Nitride PN Junctions Grown on SiC Substrates," V.A. Dmitriev, Inst. Phys. Conf., pp.1019-1022, 1996.
NZ	✓	"AlGaIn PN Junctions," V.A. Dmitriev, American Inst. of Physics, pp.115-117, 5 11 95.
OA	✓	"Effects of Ar Ion Laser Irradiation on MOVPE of ZnSe using DMZn and DMSe as Reactants," A. Yoshikawa, Journal of Crystal Growth, pp.653-658, 1991.
OB	✓	"Electric Breakdown in GaN P-N Junctions," V.A. Dmitriev, American Inst. of Physics, pp.229-231, 1 8 96.
OC	✓	"High Quality GaN Grown Directly on SiC by Halide Vapour Phase Epitaxy," Y.V. Melnik, Inst. Phys. Conf., pp.863-866, 1996.
OD	✓	"Luminescence Conversion of Blue Light Emitting Diodes," P. Schlotter, Journal of Applied Physics, pp.12-13, 2/27/97.
OE	✓	"P-Type Conduction in Mg-Doped GaN Treated with Low-Energy Electron Beam Irradiation (LEEBI)," H. Amano, Japanese Journal of Applied Physics, pp.2112-2114, 12 89.
OF	✓	"Photoluminescence of Mg-Doped P-Type GaN and Electroluminescence of GaN P-N Junction Led," I. Akasaki, Journal of Luminescence Vol. 48-49, pp.666-670, 1991.
OG	✓	"Recent Progress in AlGaIn/GaN Laser Structures on 6H-SiC," G.E. Bulman, SPIE Vol. 2693, pp.57-63, 1996.
OH	✓	"Recent Progress in GaN/SiC LEDs and Photopumped Lasers," G.E. Bulman, pp.100-101, 19xx.
OI	✓	"Role of Growth Initiation for High-Brightness GaN-Based Light Emitting Diodes," R.S. Kern, 2nd. Intern. Symp. on Blue Laser and Light Emitting Diodes, Chiba, Japan, 9/29-10/2/98.
OJ	✓	"The State of SiC: GaN-Based Blue LEDs," J. Edmond, Inst. Phys. Conf. Ser. No. 142, Chap. 6, pp.991-994, 1996.
OK	✓	"Wide Bandgap Group-III Nitride Optoelectronics," http://www.phy.duke.edu/research/photon/terahertz/gan/index.html .
OL	✓	"White LED Production at Osram," G. Bogner, Compound Semiconductor, pp.28-31, 5 99.

Examiner: 	Date Considered: 6/21/01
EXAMINER Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

FORM PTO-1449 (Modified)				U.S. Department of Commerce Patent and Trademark Office		Attorney Docket No.: NICHIA-00800		Serial No.: 09 500,288		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use Several Sheets If Necessary)						Applicant: Shuji Nakamura <i>et al.</i>				
(37 CFR § 1.98(b))						Filing Date: February 8, 000		Group Art Unit		
FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS										
		Document Number	Publication Date	Country	Patent Office	Class	Subclass	Translation		
								Yes	No	
✓	AA	04144294	5/18/92		JP	H01S	3/18	X		
↓	AB	09180998	7/11/97		JP	H01L	21/20	X		
	AC	09246651	9/19/97		JP	H01S	3/18	X		
	AD	09260772	10/3/97		JP	H01S	3/18	X		
	AE	09293935	11/11/97		JP	H01S	3/18	X		
	AF	10242565	9/11/98		JP	H01S	3/18	X		
	AG	10256645	9/25/98		JP	H01S	3/18	X		
	AH	10270792	10/9/98		JP	H01S	3/18	X		
	AI	10290027	10/27/98		JP	H01L	33/00	X		
	AM	10294529	11/4/98		JP	H01S	3/18	X		
	AN	10321962	12/4/98		JP	H01S	3/18	X		
	AN	11040893	2/12/99		JP	H01S	3/18	X		
	AO	2000-31599	1/28/00		JP	H01S	5/30		X	
	✓	AP	DE 196 48 955A1	5/28/97		DE	H01L	33/00		X
	AQ									
	OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)									
	AR	"InGaN/GaN/AlGaIn-based laser diodes with modulation-doped strained-layer superlattices grown on an epitaxially laterally overgrown GaN substrate," Shuji Nakamura et al., Applied Physics Letter, Vol. 72, No. 2, January 12, 1998.								
	AS									
	AT									
	AU									
	AV									
	AW									
	AX									
	AY									
	AZ									
	BA									
	BB									
Examiner: 					Date Considered: 6/21/01					
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.										